

Centro

Midland Metro (Brierley Hill to Wednesbury) Extension
Transport Assessment

Final Report

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1 INTRODUCTION



1 Introduction

1.1 BACKGROUND

The West Midlands PTA is preparing to submit an application for Transport and Works Act (TWA) powers to build an extension of Midland Metro Line One, between Wednesbury and Brierley Hill.

FaberMaunsell has been appointed to support the TWA process through the production of a consolidated Transport Assessment (TA).

Following discussions with Centro and their environmental consultants ERM, it was agreed that much of the TA would be developed by extracting relevant material from existing study reports. However some additional impact assessment would be required for:

- Tipton Road alignment change;
- Norish 'level crossing'; and
- Any additional 'hot spots' identified and not covered by existing studies.

In addition to this it is likely that further, detailed local assessments of transport impact may be required, to consider areas of detail or coverage not included in the scope of this TA.

The Public Inquiry is expected during 2004, and it is assumed that ERM and FaberMaunsell will be commissioned to provide evidence for and at the Inquiry.

1.2 CORE STUDY TASKS

In order to complete the TA a number of tasks have been carried out, including:

- Literature Review;
- Scheme review, identification of transport impact locations/'hot spots';
- Development of assessment framework, developing forecast years, traffic data structure, environmental thresholds, impact locations and other relevant assessment impacts;
- Identification of data/assessment shortages and approach to filling data gaps;
- Production of traffic impact forecasts for ES;
- Production of 'NATA-style' transport assessment output; and
- Production of supporting text/graphics for TA to be included in ES.

1.3 SUPPORTING TASK

Consultation with Local Authorities

The assumptions made regarding the base case, traffic growth, development trips, park and ride and traffic regulations were discussed with two highway authorities Dudley and Sandwell MBCs, these are discussed below.

1.4 LITERATURE REVIEW

Centro provided a variety of information to help to identify 'transport impacts', these documents have provided the critical data for this assessment.

The have been reviewed in terms of:

- Corridor transport assessment coverage;
- Local transport impact; and

- Construction phase.

The information provided includes:

- Drawings and Schedules:
- Reference Scheme Engineering Plans, Revisions C and D;
- TWA Drawings, Revision 6;
- "Schedule 1" Description of Works;
- Traffic Regulation Order Schedule;
- Figure 10.3 Wednesbury Line Options, 15/1/01;
- Figure 10.4 Freightliner Depot Options, 1/11/02;
- Figure 10.5 Dudley Centre Options, 16/1/01;
- Figure 10.6 Round Oak Rail Options, 1/11/02; and
- Figure 10.7 Merry Hill Options, 1/11/02.

Reports:

Midland Metro Future Routes Study – Birmingham City Centre Tramway and Wednesbury to Brierley Hill Extension, Evaluation Report, August 2000, MVA for Centro, Birmingham City Council, Sandwell MBC and Dudley MBC;

Midland Metro Future Routes Study – Birmingham City Centre Tramway and Wednesbury to Brierley Hill Extension, Information Note B21 – Version 3, Answers to Questions from DETR, November 2000, MVA for Centro, Birmingham City Council, Sandwell MBC and Dudley MBC;

Initial Outline Business Case, Centro on behalf of Dudley MBC, Birmingham CC, Sandwell MBC, WMPTA and Chelsfield plc;

Assessment of Access arrangements on Flood Street, Dudley (no date);

Round Oak Rail – Review of Alignments, 10/10/00;

Assessment of Route Options for Castle Hill, Dudley (Draft), September/October 2002;

Dudley Centre Section: Castle Hill Alternative Alignment: Preferred Route, 27/9/02;

Construction Strategy (Draft), 8/3/02;

The Impact of the Introduction of Midland Metro into Dudley and Brierley Hill, May 2002, FaberMaunsell for Centro;

Metro Extension Park and Ride Study, January 2003, FaberMaunsell for Centro;

Urban Context Analysis, January 2002, David Lock Associates for Centro;

Castle Hill Transport Assessment, August 2001, Halcrow for St. Modwen Developments Ltd; and

Trams Running With Traffic, October 2002, Mott MacDonald for Dudley MBC.

Other Information Obtained/Considered

- Road Traffic Accident Analysis;
- Midland Metro Line One Monitoring Data; and
- 'Hot spot' analysis.

1.5 REPORT STRUCTURE

This report is separated into nine sections:

Section 1 the Introduction, detailing the background of the study and the 'library' of previous studies considered in this assessment;

Section 2 provides a précis of the Literature Review;

Section 3, considers the impacts of Alternative Options, including the mode option and a number of alternative alignments considered;

Section 4 describes the Preferred Route;

Section 5 identifies the Highway Network Impacts associated with the preferred route;

Section 6 considers the impacts of the proposed stops, in terms of potential demand and access/egress;

Section 7 provides a 'NATA-type' assessment of the preferred route;

Section 8 considers a variety of Specific Issues, including construction, and the specific issues related to Norish;

Section 9 considers the views of the two local authorities; and

Section 10 provides the Conclusions, identifying any significant data shortages and details of comments from the local authorities.

2 LITERATURE REVIEW



2 Literature Review

2.1 INTRODUCTION

The major source of information for this Transport Assessment was the wide variety of reports/studies provided by Centro, carried out by others (including FaberMaunsell) to determine the preferred scheme for the Midland Metro Line One Extension.

The documents were reviewed and provided significant input to the details of this Transport Assessment, a precis of each report is given below:

Midland Metro Future Routes Study – Birmingham City Centre Tramway and Wednesbury to Brierley Hill Extension, Evaluation Report, August 2000, MVA for Centro, Birmingham City Council, Sandwell MBC and Dudley MBC.

This study was produced to support the bid for funding from the DETR for the construction of extensions to the existing Midland Metro Line 1.

The document describes in detail, all aspects of the operation of the new metro routes through Birmingham City Centre and from Wednesbury to Brierley Hill including route descriptions, journey times, tram capacity and fares.

Midland Metro Future Routes Study – Birmingham City Centre Tramway and Wednesbury to Brierley Hill Extension, Information Note B21 – Version 3, Answers to Questions from DETR, November 2000, MVA for Centro, Birmingham City Council, Sandwell MBC and Dudley MBC.

This was prepared by MVA in response to points raised by DETR at a series of meetings between 12 October and 2 November 2000. The queries related to the results presented in the MVA evaluation report of August 2000.

The document contains a number of sensitivity and economic evaluation tests for factors including Road User Charging in Birmingham, Additional Development Trips and revised capital and vehicle costs. It also makes amendments to capital cost and developer contributions and provides more detail and new information on a number of issues.

Analysis of alternative modes on both new routes concludes that the metro is the most feasible of the alternatives and will provide the most benefits to current and potential public transport users.

The closing sections of the report provide patronage and revenue forecasts, a simplified AST and a risk assessment.

2.2 INITIAL OUTLINE BUSINESS CASE, CENTRO ON BEHALF OF DUDLEY MBC, BIRMINGHAM CC, SANDWELL MBC, WMPTA AND CHELSFIELD PLC

This document is based on an amalgamation of the following documents:

- Midland Metro Extensions Study – Draft Evaluation Report by MVA June 2000;
- Guidance on Full Local Transport Plans (LTP) – DETR March 2000;
- Twenty Year Public Transport Strategy – West Midlands PTA and Centro, April 2000;
- West Midlands LTP 2000 – West Midlands Joint Committee, July 2000;
- The Birmingham Plan – Birmingham UDP – Birmingham City Council, adopted July 1993;
- The Dudley UDP – Dudley MBC, adopted November 1993;
- Sandwell UDP 1995 – Sandwell MBC, adopted January 1995;
- Values of Time and Vehicle Operating Costs for use in Economic Appraisal (Highways Economic Note 2), DETR – 1999 Edition; and